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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,901	02/11/2002	Koichi Watanabe	016907-1373	3551

22428 7590 04/04/2007
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EXAMINER

LEE, CHEUKFAN

ART UNIT	PAPER NUMBER
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2625

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.		Applicant(s)	
	10/068,901		WATANABE, KOICHI	
	Examiner		Art Unit	
	Cheukfan Lee		2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 May 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. Claims 1-3 remain pending. Claim 1 is independent.
2. The proposed corrected Fig. 4 (labeled with "PROR ART") is not acceptable because the change was made on a non-English language version of the figure. A corrected Fig. 4 can be submitted after the claims are indicated allowable.
3. The indicated allowability of claims 1-3 is withdrawn. The Examiner's purpose is to issue valid patents. On a second though the invention as claimed in claims 1, 2 or 3 is not patentable distinct from the prior art of record for the reasons given below.
4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yaguchi et al. (U.S. Patent No. 5,889,596) in view of well known art.

Regarding claim 1, Yaguchi et al. discloses an image reading apparatus in an image processing apparatus (Fig. 1). Yaguchi et al. states that "when the document sheet are sequentially read by using the document feeder, the feeding and the reading of the next document sheet can be controlled prior to the completion of the

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compression, so that the high efficiency reading and compression are attained". (col. 8, lines 11-15).

Yaguchi et al. discloses an image reading apparatus (image processing apparatus, Figs. 1-4) comprising a feed section (feed unit 1 in Fig. 1) which feeds original one by one (col. 4, lines 25-28), a reading section (4) which reads an image on an original fed from the feed section (1) (col. 4, lines 29-35), a storage section (page memory 40 in Fig. 4) which stores image data read by the reading section (4), **a first controls section (1021 in Fig. 2)** which executes a control to feed the next original from the feed section (1), when the image data of the original has been stored in the storage section (page memory 40) and in the condition that the predicted value of the predicted compressed data amount is less than or equal to the remaining capacity of a memory unit (44 of 35 of 1023) for storing compressed value, the same image data of the original being supplied to the storage section (40) and prediction unit (45 in Fig. 1), and **a second control (1023) which executes a control to read out the image data from the storage section (40) and subject the read-out data to an encoding process (by compression unit 43 of 35 of 1023, Figs. 2-4), in parallel with the control by the first control section (1021),** and to store a result of the encoding process in the memory unit (44), not in the storage section (page memory 40) (first embodiment, Figs. 1-7, col. 4, line 20 – col. 8, line 26, note col. 8, lines 11-15). Yaguchi et al. stores the result of the encoding process in a storage section (44) other than the storage section (40) from which image data subjected to encoding is read out. Yaguchi et al. further discloses in a second embodiment in which a memory of a large capacity,

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i.e., the printer buffer memory (PBM 65), is employ (col. 8, lines 27+, Figs. 8+), the PBM is for storing compressed image data, not image data to be read out to be compressed. The image data to be compressed are stored in page memories (19 and 20).

Although not disclosed by Yaguchi et al., employing a large enough memory, such as a hard drive disk, to store various type of data and/or information is not a novel idea but known in the art. One of ordinary skill in the art would have realized the advantage of employ such a large memory to reduce the number of parts and simplify memory control, as compared to employing more than one memory as in the case of Yaguchi et al. (see memory 44 for storing the result of the encoding process and other memories 40, etc.). It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a large enough memory, such as a hard drive disk, to accommodate the various types of data of Yaguchi et al., including the image data reading section and to be read out for compressing/encoding, and the result of the encoding process, in order to reduce the number of parts and simplify memory control.

Regarding claim 3, Yaguchi et al. differs from the claimed invention in that the compression method for compressing the image data from the reading section discussed for claim 1 above is not necessarily JPEG but a variable-length compression method such as MH-coding, Q-coder, Lempel Ziv, etc. (col. 6, lines 24-29, and col. 12). However, Yaguchi et al. also discloses comparing compressed image data resulted from such a variable length reversible compression system to a fixed length non-

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reversible compression system such as the JPEG (col. 11, line 60 – col. 12, line 6).

One of ordinary skill in the art would have realized the advantage of employing a fixed length non-reversible compression system such as JPEG, and no matter the compression system being employed, and that the same concept of the second control section (1023) of Yaguchi et al. executing control to read out the image data from the storage section and subject the read-out data to an encoding/compression process, in parallel with the control by the first control section (1021) of Yaguchi et al. executing control to feed the next original from the feed section, is applicable. Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the JPEG system in compressing the image data from the reading section shown in Fig. 1.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheukfan Lee whose telephone number is (571) 272-7407. The examiner can normally be reached on 9:30 a.m. to 6:00 p.m., Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Cheukfan Lee
March 26, 2007